

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method of manufacturing an optical waveguide, comprising:
 - (a) forming a convex member on a substrate;
 - (b) discharging droplets onto an upper surface of the convex member to form a precursor of an optical waveguide member; and
 - (c) hardening the precursor to form an optical waveguide member, the optical waveguide member being formed solely along the convex member.
2. (Previously Presented) The method of manufacturing an optical waveguide according to claim 1, in (a), the convex member being formed on the substrate by providing a base member on the substrate.
3. (Previously Presented) The method of manufacturing an optical waveguide according to claim 2, in (a), the convex member being formed on the substrate by forming a groove in the substrate.
4. (Original) The method of manufacturing an optical waveguide according to claim 1, the precursor being hardened by adding energy.
5. (Original) The method of manufacturing an optical waveguide according to claim 1, the discharging of the droplets being performed according to an ink jet method.
6. (Previously Presented) The method of manufacturing an optical waveguide according to claim 1, further comprising:
 - (d) covering the optical waveguide member with a layer that has a lower refractive index than the optical waveguide member.

7. (Previously Presented) The method of manufacturing an optical waveguide according to claim 1, further comprising:

(e) detaching the optical waveguide member from the substrate.

8. (Previously Presented) The method of manufacturing an optical waveguide according to claim 1, further comprising:

(f) adjusting the wettability for the droplets of an upper surface of the convex member before the droplets are discharged.

9. (Previously Presented) a method of manufacturing an optical waveguide, comprising:

(a) forming a first convex member on a substrate;

(b) forming a second convex member on the substrate in parallel with the first convex member;

(c) discharging first droplets onto an upper surface of the first convex member to form a precursor of an optical waveguide member;

(d) hardening the precursor of the optical waveguide member to form the optical waveguide member;

(e) forming a precursor for a covering layer that is formed on an upper surface of the second convex member and covers the optical waveguide member; and

(f) hardening the precursor for a covering layer to form the covering layer with a lower refractive index than the optical waveguide member,

the entire optical waveguide member being formed solely along the first convex member.

10. (Previously Presented) The method of manufacturing an optical waveguide according to claim 14, in (e), the precursor for a covering layer being formed by discharging

second droplets onto the optical waveguide member and the upper surface of the second convex member.

11. (Previously Presented) The method of manufacturing an optical waveguide according to claim 9, in (b), two of the second convex members are formed and the first convex member being disposed between the two second convex members.

12. (Original) The method of manufacturing an optical waveguide according to claim 9, the first and second droplets having a property whereby the droplets can be hardened by applying energy.

13. (Original) The method of manufacturing an optical waveguide according to claim 9, the hardening of the covering layer being performed by adding energy.

14. (Original) The method of manufacturing an optical waveguide according to claim 9, the first and second droplets having a property whereby the droplets are hardened by applying energy.

15. (Original) The method of manufacturing an optical waveguide according to claim 9, the discharging of the first and second droplets being performed according to an ink jet method.

16. (Currently Amended) An optical waveguide, comprising:
a convex member provided on a substrate; and
an optical waveguide member provided solely on the convex member,
the convex member having a lower refractive index than the optical waveguide member.

a maximum width of maximum cross-section of the optical waveguide member being longer than a width of a lower surface of the optical waveguide member.

17. (Canceled)

18. (Previously Presented) The optical waveguide according to claim 16,

a covering layer being formed around the optical waveguide, and the refractive index of the convex member and the refractive index of the covering layer are approximately equal.

19. (Previously Presented) The optical waveguide according to claim 16, the convex member being integrally formed with the substrate.
20. (Previously Presented) The optical waveguide according to claim 16, a cross-section of the optical waveguide member being in the shape of a truncated circle or a truncated oval.
21. (Previously Presented) The optical waveguide according to claim 16, a cross-section of the optical waveguide member being in the shape of a circle or an oval.
22. (Previously Presented) The optical waveguide according to claim 16, an upper surface of the convex member being a curved surface.
23. (Previously Presented) The optical waveguide according to claims 16, an angle made between an upper surface of the convex member and a surface that contacts the upper surface on a side part of the convex member being acute.
24. (Previously Presented) The optical waveguide according to claim 16, an upper part of the convex member being formed in an inversely tapered shape.
25. (Previously Presented) The optical waveguide according to claim 16, the optical waveguide being buried under a layer with a lower refractive index than the optical waveguide member.
26. (Currently Amended) An optical waveguide, comprising:
a first convex member provided on a substrate;

an optical waveguide member provided solely on an upper surface of the first convex member;

a second convex member provided on the substrate, the second convex member being disposed in parallel with the first convex member; and

a covering layer that covers an optical waveguide member and is provided in part on an upper surface of the second convex member.

27. (Previously Presented) The optical waveguide according to claim 26, the optical waveguide includes two of the second convex members and the first convex member being disposed between the two second convex members.

28. (Original) A circuit board, comprising:
the optical waveguide according to claim 16;
an IC; and
an optical element.

29. (Original) An optical module, comprising:
the optical waveguide according to claim 16.

30. (Original) An optical transfer apparatus, comprising:
the optical module according to claim 29.

31. (Currently Amended) An optical waveguide, comprising:
a convex member provided on a substrate; and
an entire optical waveguide member provided solely on the convex member,
the convex member being disposed in parallel with the optical waveguide ~~member-member,~~

a maximum width of maximum cross-section of the optical waveguide member being longer than a width of a lower surface of the optical waveguide member.